

What is claimed is:

1. A composite sheet, which is applied to the surface of skin for delivering a therapeutic agent to the skin comprising:

a flexible porous polymer foam material for holding and releasing the agent, or therapeutic agent

a polymer enrobing material which is in contact with the skin and encapsulates the polymer foam material and holds and releases the agent, and

a plurality of micro-channels passing through the polymer enrobing material and polymer foam material for holding and releasing the agent.

2. The composite sheet according to Claim 1 wherein the sheet is capable of releasing the therapeutic agent for a period of up to about 14 to about 30 days.

3. The composite sheet according to Claim 1 wherein the porous foam material has open face pores for holding and releasing the therapeutic agent having a diameter of up to about 200 to about 300 microns.

4. The composite sheet according to Claim 1 wherein the porous polymer foam material may be selected from the group consisting of polyurethane, polyvinylacetate, butyl, polyvinyl alcohol, and polyethylene.

5. The composite sheet according to Claim 1 wherein the polymer enrobing material which encapsulates the porous polymer foam material may be selected from the group consisting of silicone, hydrogels, ethylene-vinyl acetate and polyurethane elastomers.

6. The composite sheet according to Claim 1 wherein the sheet has a first side and a second side which contacts the skin with the microchannels, passing there through forming an area for holding and directly releasing the therapeutic agent onto or into the skin and into the porous polymer foam material and polymer enrobing material for subsequent release to the skin.

7. The composite sheet according to Claim 6 having a removable rigid polymer strip, which is applied to the first and second sides for retaining the therapeutic agent in the microchannels prior to application of the sheet to the skin.

8. The composite sheet according to Claim 1 wherein the porous polymer foam material may be silicone.

9. The compound sheet according to Claim 1 wherein the therapeutic agent may be selected from the group consisting of Vitamin E, Vitamin C, emu oil, aloe vera, silver sulphadine, polymyxine B, and fusidic acid.

10. A method of treating scar tissue on human skin comprising:
applying to the scar tissue a composite sheet comprising a flexible porous foam material for holding and releasing an agent or therapeutic agent, a polymer enrobing material which is in contact with the skin and encapsulates the polymer foam material and holds and releases a therapeutic agent and a plurality of microchannels passing therethrough the polymer enrobing material and polymer foam material for holding and releasing the therapeutic agent to the skin.

11. The method according to Claim 10, wherein the sheet is applied to the surface of the skin for up to about 14 to about 30 days.

12. The method according to Claim 10, wherein the therapeutic is selected from the group consisting of platelet derived growth factor, vitamin A acid, corticosteroids, and interferon.

13. The method according to Claim 10, wherein the porous polymer foam material selected from the group consisting of polyurethane, polyvinylacetate, butyl, polyvinyl alcohol, and polyethylene.

14. The method according to Claim 10, wherein the polymer enrobing material which encapsulates the porous polymer foam material is selected from the group consisting of silicone, hydrogels, ethylene-vinyl acetate and polyurethane elastomers.